Methyl Bromide Field Fumigation Workbook

January 2001

WORKSITE PLAN EXERCISE

Happy Go Lucky Farms Scenario

Mr. Dragon is a large grower in your county, he is the owner of Happy Go Lucky Farms. He has come in 5days before he wants to fumigate 3 of his sites with his Worksite plans. Those sites are **Happy Site 1**, **Lucky Site 2** and part of his **Pretty Greenhouse**. Mr. Dragon is the certified applicator/private applicator, and he would like to give you a NOI for all his sites today.

Happy Site 1: Is a 45 acre block. Mr. Dragon wants to do the Tarpaulin /Shallow/Bed Method. He wants to use 250lbs Methyl bromide per acre. Mr. Dragon tells you that he will be the responsible person for any tarp repairs on all the sites, and that this year he bought a SCBA for his employees to use incase of an emergency and he has trained them how to use it. Mr. Dragon has brought in maps of the sites, and since you have been working so long for the county you are familiar with the sites that he wants to fumigate.

You figure out the buffer zones for **Happy Site 1** and you realize at the back part of this site there is a horse barn with stalls/arena with horses in them. But that also on top of the barn is a living quarters, where someone lives. You ask Mr. Dragon what he's is going to do about the person living in the barn and if there will be any traffic going in and out of the barn during the fumigation to get horses in and out of their stalls.

Also by looking at the maps you notice that 270ft outside of the perimeter of the outer buffer zone that there are three very large house. And you believe some kind of Notification in writing is required with some information, to the owners of those houses. You remind Mr. Dragon that Notification in writing is required by your commissioners.

Lucky Site 2: Is a 35 acre block, Mr. Dragon wants to use Drip System-Hot Gas at 250lbs per acre. After figuring out the outer buffer zones you notice on the maps that there is a shed with a fenced in yard. Were the workers for Mr. Dragon come and get equipment and sometimes stay and have lunch. On the east side of the property about 350ft from the perimeter of the outer

buffer zone is a convalescent hospital and some houses. Is there some kind of notification required?

Pretty Greenhouse: Mr. Dragon also tells you that since he is in the office doing site plans for his other two sites. He might as well put in a site plan for his Greenhouse site. He was thinking of doing the Tarpaulin/Shallow/Bed method, and he wanted to use 200lbs of Methyl Bromide. The entire greenhouse is about 15 acres.

METHYL BROMIDE FIELD FUMIGATION – WORKSITE PLAN

Happy Site 1

Property Operator: **Happy Go Lucky Farms**
Address: **3333 Round About Lane**
Phone: **(393) 570-1277**
Permit Number:
Contact Person: **Steve Dragon**
Fumigation Site Location: **Happy Site 1**
Pest Control Business: **None**
Address:
Phone:
Contact Person:

Buffer Zone

Methyl Bromide Product: **Methyl Bromide 67/33**
Application Rate: **250 lbs./acre**
Number of Acres: **45**
Application Method: **6450.3(a)(4) Tarpaulin/Shallow/Bed**
Type of Tarpaulin: **Armin HBA**
Earliest Date of Fumigation: **2/14/2001**
Latest Date of Fumigation: **2/15/2001**
Description of Activities/Within Buffer Zones: **Employees on tractors driving by to get to other sites, people getting horses and riding in arena.**
Map showing: Field Location, Field Dimensions, Housing, Sensitive Sites: **See attached**

Notification to Nearby Properties

Method of Notification: **None**
Copy of Notification:
Date(s) of Notification: **Tell them the day before application**
Map showing properties notified: **See attached**

Tarpaulin Repair Plan

Person Responsible: **Steve Dragon**
Certification: **Private Applicator #0013**
Schedule for Checking Tarpaulins: **8:00am – 5:00pm**
Minimum Distance(s) from Sensitive Sites that Tarps will be repaired: **300ft**
Minimum Time following Injection that Tarps will be repaired: **4 days**
Minimum Size of Damage that will be repaired: **6 inches**
Type of Testing Device used to Measure Air Concentrations: **Drager**
Type of Respiratory Protection: **My new SCBA**

Tarpaulin Removal Plan

Person Responsible: **Steve Dragon, Happy Go Lucky Farms**
Equipment Used to Cut Tarps:
Schedule for Tarp Cutting:
Schedule for Tarp Removal:

METHYL BROMIDE FIELD FUMIGATION – WORKSITE PLAN

Lucky Site 2

Property Operator: **Happy Go Lucky Farms**
Address: **3333 Round About Lane**
Phone: **(393) 570-1277**
Permit Number: **99-03456-5051**
Contact Person: **Steve Dragon**
Fumigation Site Location: **Lucky Site 2**
Pest Control Business: **None**
Address:
Phone:
Contact Person:

Buffer Zone

Methyl Bromide Product: **Methyl Bromide 67/33**
Application Rate: **250 lbs./acre**
Number of Acres: **35**
Application Method: **6450.3(a)(6) Drip System Hot Gas**
Type of Tarpaulin: **Armin HBA**
Earliest Date of Fumigation: **2/15/2001**
Latest Date of Fumigation: **2/17/2001**
Description of Activities/Within Buffer Zones: **Employees driving tractors in and out of fenced yard, employees sitting at tables eating lunch.**
Map showing: Field Location, Field Dimensions, Housing, Sensitive Sites: **See attached**

Notification to Nearby Properties

Method of Notification: **None**
Copy of Notification: **None**
Date(s) of Notification: **Tell them the day before application.**
Map showing properties notified: **See attached**

Tarpaulin Repair Plan

Person Responsible: **Steve Dragon**
Certification: **Private Applicator #0013**
Schedule for Checking Tarpaulins: **8:00am – 5:00pm**
Minimum Distance(s) from Sensitive Sites that Tarps will be repaired: **300ft**
Minimum Time following Injection that Tarps will be repaired: **4 days**
Minimum Size of Damage that will be repaired: **6 inches**
Type of Testing Device used to Measure Air Concentrations: **Drager**
Type of Respiratory Protection: **My new SCBA**

Tarpaulin Removal Plan

Person Responsible: **Steve Dragon, Happy Go Lucky Farms**
Equipment Used to Cut Tarps: **ATV**
Schedule for Tarp Cutting: **5 days after fumigation**
Schedule for Tarp Removal: **6 days after fumigation**

METHYL BROMIDE FIELD FUMIGATION – WORKSITE PLAN

Pretty Greenhouse Site 3

Property Operator: **Happy Go Lucky Farms**
Address: **3333 Round About Lane**
Phone: **(393) 570-1277**
Permit Number: **99-03456-5052**
Contact Person: **Steve Dragon**
Fumigation Site Location: **Pretty Greenhouse Site 3**
Pest Control Business: **None**
Address:
Phone:
Contact Person:

Buffer Zone

Methyl Bromide Product: **Methyl Bromide 67/33**
Application Rate: **200 lbs./acre**
Number of Acres: **15**
Application Method: **6450.3(a)(4) Tarpaulin Shallow Bed**
Type of Tarpaulin: **Armin HBA**
Earliest Date of Fumigation: **2/16/2001**
Latest Date of Fumigation: **2/17/2001**
Description of Activities/Within Buffer Zones: **Crew planting and loading plants**
Map showing: Field Location, Field Dimensions, Housing, Sensitive Sites: **See attached**

Notification to Nearby Properties

Method of Notification: **None**
Copy of Notification: **None**
Date(s) of Notification: **Tell them the day before application**
Map showing properties notified: **See attached**

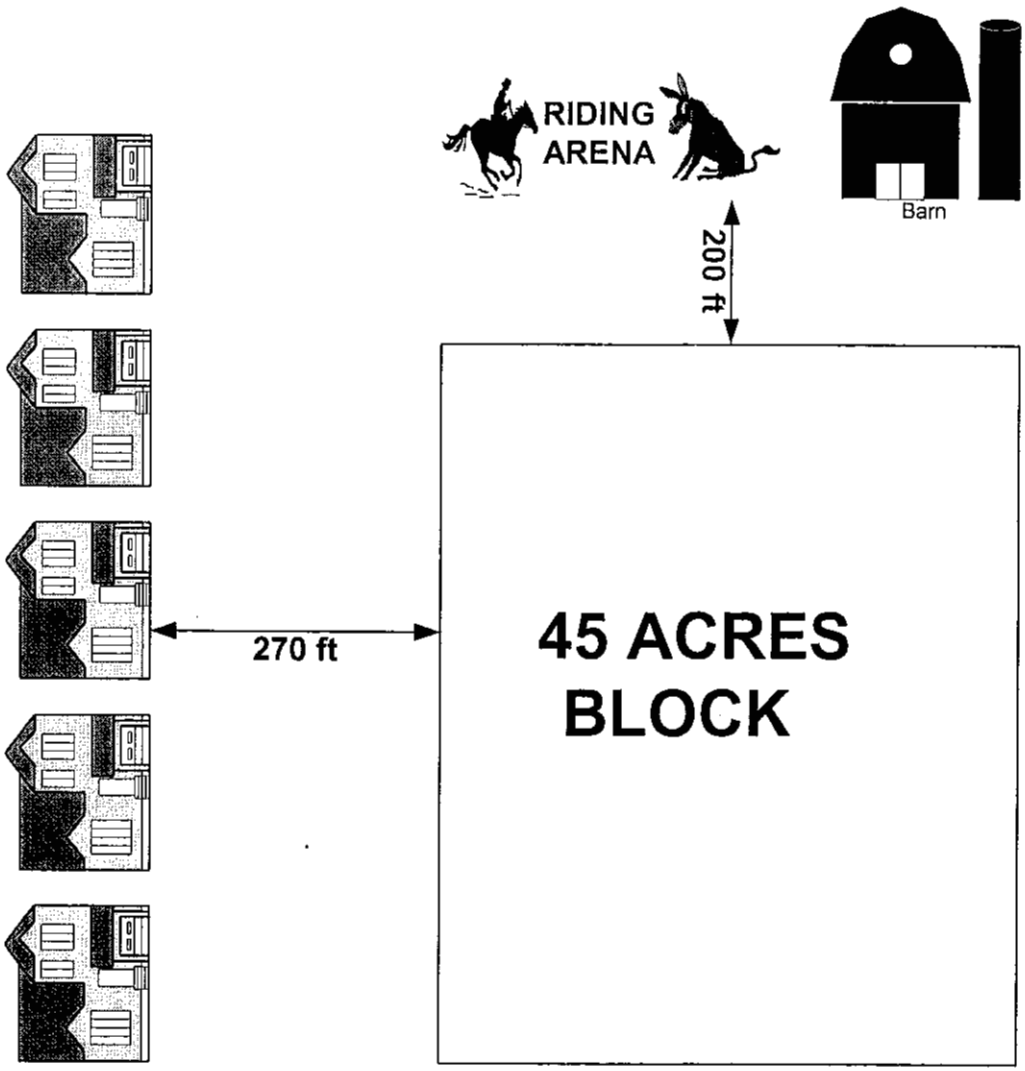
Tarpaulin Repair Plan

Person Responsible: **Steve Dragon**
Certification: **Private Applicator #0013**
Schedule for Checking Tarpaulins: **8:00am – 5:00pm**
Minimum Distance(s) from Sensitive Sites that Tarps will be repaired: **300 feet**
Minimum Time following Injection that Tarps will be repaired: **4 days**
Minimum Size of Damage that will be repaired: **6 inches**
Type of Testing Device used to Measure Air Concentrations: **Drager**
Type of Respiratory Protection: **My new SCBA**

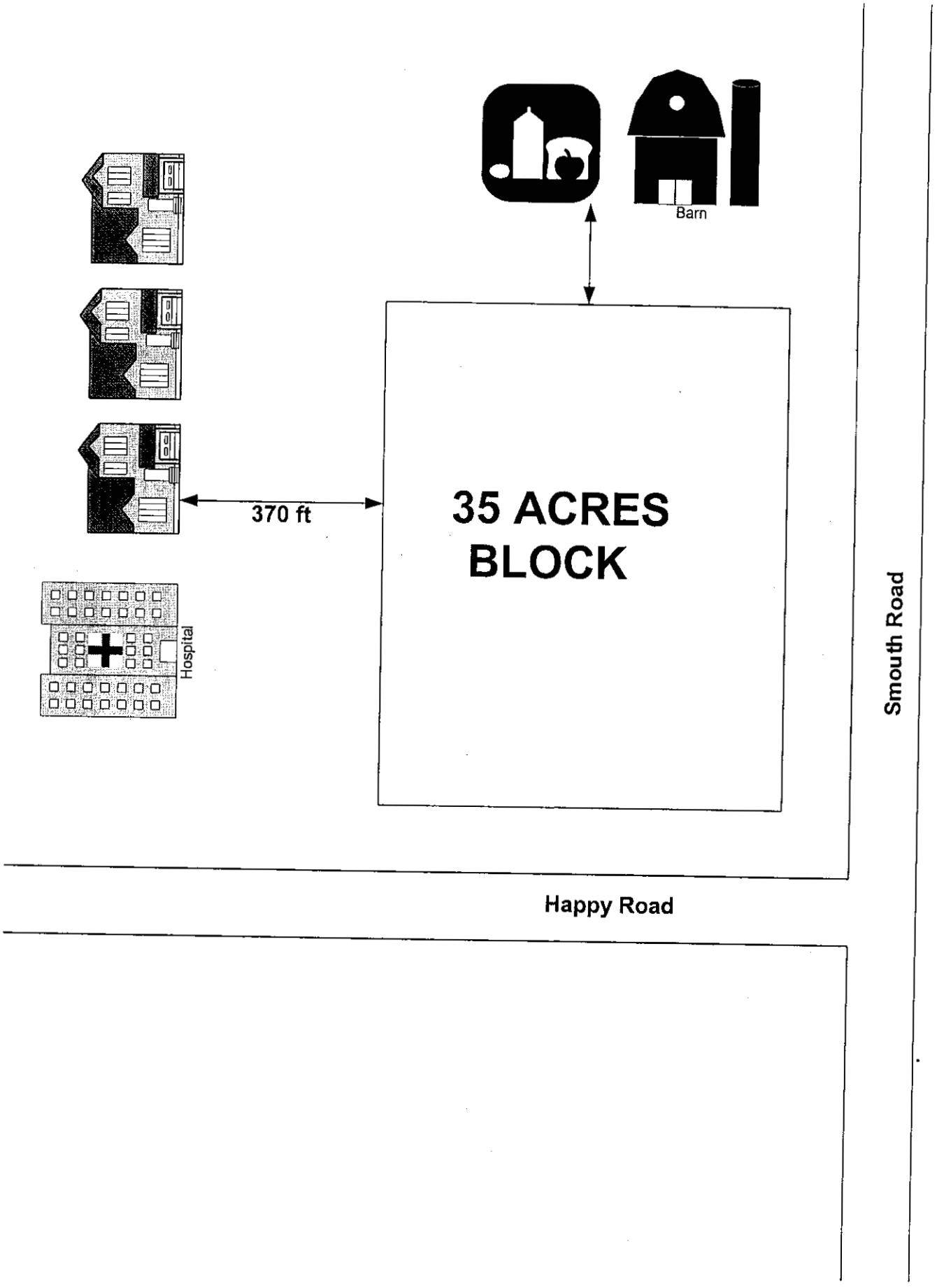
Tarpaulin Removal Plan

Person Responsible: **Steve Dragon, Happy Go Lucky Farms**
Equipment Used to Cut Tarps: **ATV**
Schedule for Tarp Cutting: **5 days after fumigation**
Schedule for Tarp Removal:

HAPPY GO LUCKY FARMS "HAPPY SITE 1"



HAPPY GO LUCKY FARMS "HAPPY SITE 2"



WORKSITE PLAN EXERCISE & BUFFER ZONE SCENARIOS

January 4, 2001

Methyl Bromide Field Fumigation

Del Rose Nursery Scenario

Specializing in Soil Fumigation

P.O. BOX 1327
HOLLISTER, CA 95024

TRI CAL

INVOICE NUMBER

1029 RAILROAD STREET
CORONA, CA 91720

NOTICE OF INTENT TO APPLY RESTRICTED MATERIALS AND/OR PEST CONTROL RECOMMENDATION

WORK ORDER NO.

County Sutter
Address
County No. 51
Permittee: Del Rose Nursery
Address:
Environmental Changes:

Permit No. 98-51-00 5-5-5
Date of Application 10/19/00 TUE.
Crop Rose

Sec.	Twn.	Rng.	Map ID
21	16N	3E	(Gas)

Location to be treated: E-5
E/Broadway · 25m N Nuestro
Pests: (Weed seeds, Nematodes, Soil-fungus)
No. of days before planting: 14
Method: Ground application
[redacted] TARP

I CERTIFY THAT I HAVE CONSIDERED ALTERNATIVES AND MITIGATION MEASURES THAT WOULD SUBSTANTIALLY LESSEN ANY SIGNIFICANT IMPACT ON THE ENVIRONMENT, AND HAVE ADOPTED THOSE FOUND FEASIBLE.

(✓) Fumigant To Be Used		lbs/acre	acres
(✓) Tri-Form	11220-16	200	2
( ) Tri-Con 80/20	62266-01-11220		
( ) Tri-Con 75/25	11220-08		
( ) Tri-Con 67/33	11220-07		
( ) Tri-Con 57/43	11220-04		
( ) M.B. 98.5%	8536-13-11220		
( ) M.B. 98%	8536-17-11220		
( ) Other			

TREATMENT AREA

Days before harvest: N/A
Worker Re-entry: N/A WHITE [redacted] DAYS - CUT TARP - WHITE 24 HRS Remove Tarp
Posting Req. ☒ Yes ☐ No
Reason(s) for Recommendation: For the prevention of suspected nematode pathogens in the soil.

Hazards/Warnings: Follow County Permit Conditions

Submitted and/or Recommended By GARY STORKAN License No. 7514 Date 10/17/00 FX

File Date: Time:
Agricultural Commissioner:

Date:
NOI Approved ☐ Denied ☐

** DO NOT FEED PLANT RESIDUES, FORAGE OR STRAW TO LIVESTOCK
PLEASE SEE THE CONDITIONS ON THE REVERSE SIDE

37649

COUNTY

TRI CAL INC.

DATE: 10/17/0

ARY STORKAN
TRUCK & MSGS:
755-8243

GROWER: Del Rose Nursery

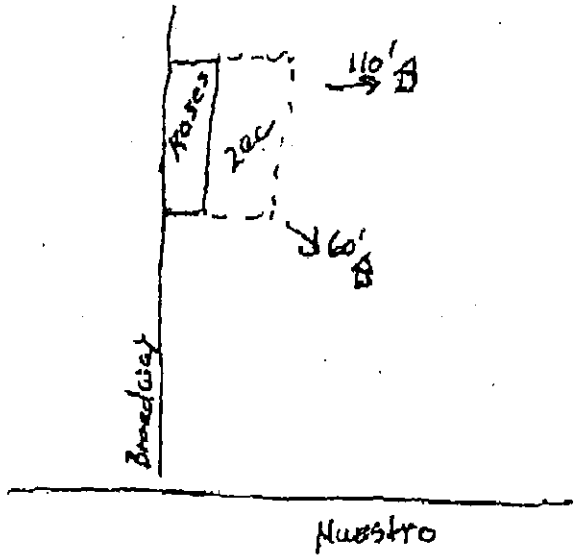
PERMIT NO: 99-5100535 AC

PHONE NO: 673 6280

FAX
846-5271
BUTTE.....538-7594
SUTTER.....822-7511
YUBA.....743-4442
TEHEMA.....529-1045
YOLO.....662-6094
COLUSA.....458-0580
PLACER.....823-1698

Work Plan ✓
NOI ✓

TN



WORK PLAN

Field No.	Commodity	Application Rate (Lbs./Acre)	Method No.	Emission Ratio	Emission Rate
1-3	Rose	200	# 5 Tarp	—	—

Field No.	Application Block Acreage	Emission Rate	Resident Buffer Zone	Emission Ratio/2	Worker Buffer Zone
1-3	2	—	50'	—	30'

Methyl Bromide Field Fumigation - Worksite Plan Scenario

Property Operator: **Del Rose Nursery**
Address:
Phone:
Permit Number:
Contact Person
Fumigation Site Location
Pest Control Business: **Trical**
Address
Phone
Contact Person

Buffer Zone

Methyl Bromide Product: **Tri-Brom**
Application Rate: **200 lbs/ac**
Number of Acres: **2 acres**
Application Method: **6450.3(a)(3)(B)(1); tarp/shallow/broadcast**
Type of Tarpaulin: **Armin HBA**
Earliest Date of Fumigation: **10/17/00**
Latest Date of Fumigation: **10/31/00**
Description of Activities Within Buffer Zones: **Handling activities**
Map showing field location, field dimensions, housing, sensitive sites: **See attached**

Notification to Nearby Properties

Method of Notification: **Flyer**
Copy of Notification: **See attached**
Date(s) of Notification: **10/8/00**
Map showing properties notified: **See attached**

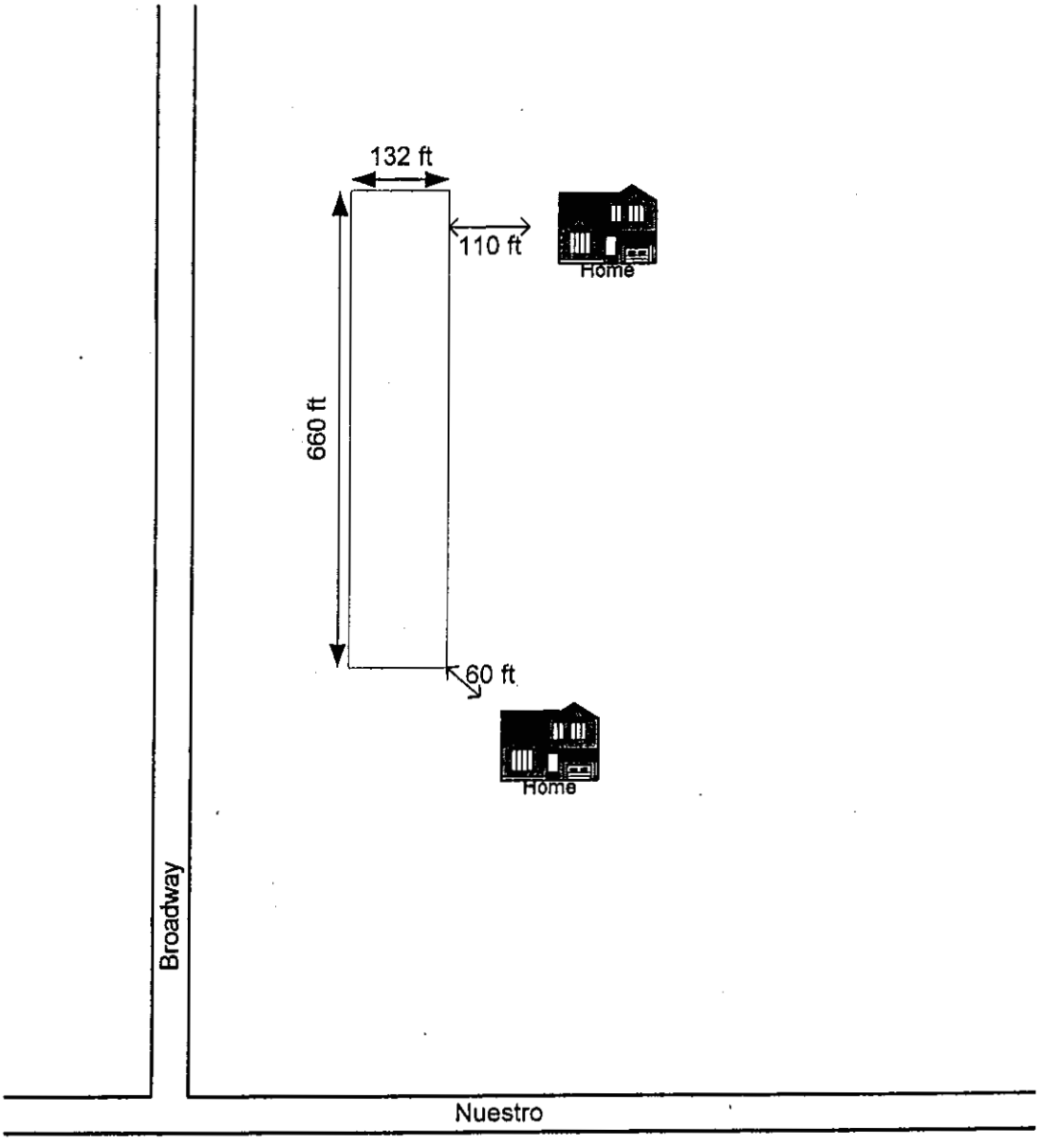
Tarpaulin Repair Plan

Person Responsible: **Gray Davis, Del Rose Nursery**
Certification: **Private applicator, #0001**
Schedule for Checking Tarpaulins: **8:00 AM, 5:00 PM**
Minimum Distance(s) From Sensitive Sites That Tarpaulins Will Be Repaired: **100 ft**
Minimum Time Following Injection That Tarpaulin Will Be Repaired: **4 days**
Minimum Size of Damage That Will Be Repaired: **6 inches**
Other Factors Used to Decide If Tarpaulins Repaired
Type of Testing Device Used To Measure Air Concentrations: **Drager**
Type of Respiratory Protection: **MSA SCBA**

Tarpaulin Removal Plan

Person Responsible: **Gray Davis, Del Rose Nursery**
Equipment Used to Cut Tarpaulins: **ATV**
Schedule for Tarpaulin Cutting: **6 days after fumigation**
Schedule for Tarpaulin Removal: **7 days after fumigation**

Del Rose Nursery



Del Rose Nursery Buffer Zone Calculations

Methyl Bromide Product: **Tri-Brom**
Application Rate: **200 lbs/ac**
Number of Acres: **2**
Application Method: **6450.3(a)(3)(B)(1); tarp/shallow/broadcast**

Del Rose Nursery Calculation

Isolated/Non-Isolated Block = **Isolated**
Application Rate = 200 lbs/ac X 0.995 percent = **199 lbs/ac**
Emission Rate = 200 lbs/ac X 0.995 percent X 0.25 emission ratio = **49.75 lbs/ac-day**
Acreage = **2 ac**
Outer Buffer Zone = Table 3, inland county, 2 ac = **60 ft**
Inner Buffer Zone = Table 4, 60 lbs/ac-day, 2 ac = **50 ft**
Buffer Duration = Table 5C, 200 lbs/ac, 2 ac = **36 hrs**

Methyl Bromide Field Fumigation

V & L Farms Scenario

RESTRICTED MATERIALS, RECOMMENDATION AND FIELD WORK ORDER

907233 V & L FARMS INC
PER ID-27-00-27-S094A-R
ERM- V & L FARMS INC.
P.O. BOX 6310
SALINAS, CA 93912

AP-VL-01 00003-00
ANCH- 764 WILLIAMS RD. (1)
LOCK-764 WILLIAMS RD LOT 14C

MJ#- 1479

SALINAS
P.O. BOX 657
SALINAS, CA 93902-

COUNTY USE ONLY
MONTEREY COUNTY
1428 ABBOTT ST.
SALINAS

☒ APPROVED ☐ DENIED

X
AG COMMISSIONER DATE

SCHOOL

OPEN GROUND

12.60 AC OPEN GROUND

HOUSES
HIGH SCHOOL

FARMLAND

SITE-01014C

STRAWBERRIES

FARMLAND
APARTMENTS

248147-0

FIELD	SEC.	TWP	RANGE	TREATED ACRES	PLANTED ACRES
01014C	25	14S	03E	12.60	21.50

CROP AND PLANTINGS	SLS	WHS	CUST P.O. NO.
OPEN GROUND PG	649	649	4832

PEST CONTROL OPERATOR/APPLICATOR LIC.# 30352
WESTERN FARM SERVICE (831)757-5391

METHOD
GROUND

PRODUCT DESCRIPTION	PEST/CRITERIA CODE *	RATE/AC	TOTAL APPLIED	PRICE (4 DEC.)	QUANTITY (2 DEC.)	✓
FUMIGATION 1300100			12.60 AC			
METHYL BROMIDE 67/33 7949910 ~~0622-00013~~	385# NEMATODE D	350.00 LB	4410.00 LB	METHYL BROMIDE	L	N
RED GLUE 8964240	MISCELLANEO	8.00 GA	100.80 GA			N
HIGH BARRIER 1MLX15X3407 8939180	MISCELLANEO	1.00 EA	12.60 EA			N

* CODES ON REVERSE SIDE

APPLICATOR INFORMATION

APPL. DATE	6/18/2 6/19
VOL/AC	
ROWSET/ SPACING	
HAZARD LEVEL	

COMPLETION DATE: TIME:

DRIVER	RIG	HOURS

TYPE 5 APPLICATION START AT FIRST LIGHT-SENSITIVE SITE RBZ=300' WBZ=30'

WFSI WILL POST

☒ I CERTIFY THAT I HAVE CONSIDERED ALTERNATIVES AND METHODS/PRACTICES THAT WOULD SUBSTANTIALLY LESSEN ANY SCREENING IMPACT ON THE CROP OR ENVIRONMENT AND HAVE ADOPTED THOSE FOUND FEASIBLE.

602/MARTIN OCONNOR 01153 6/09/00

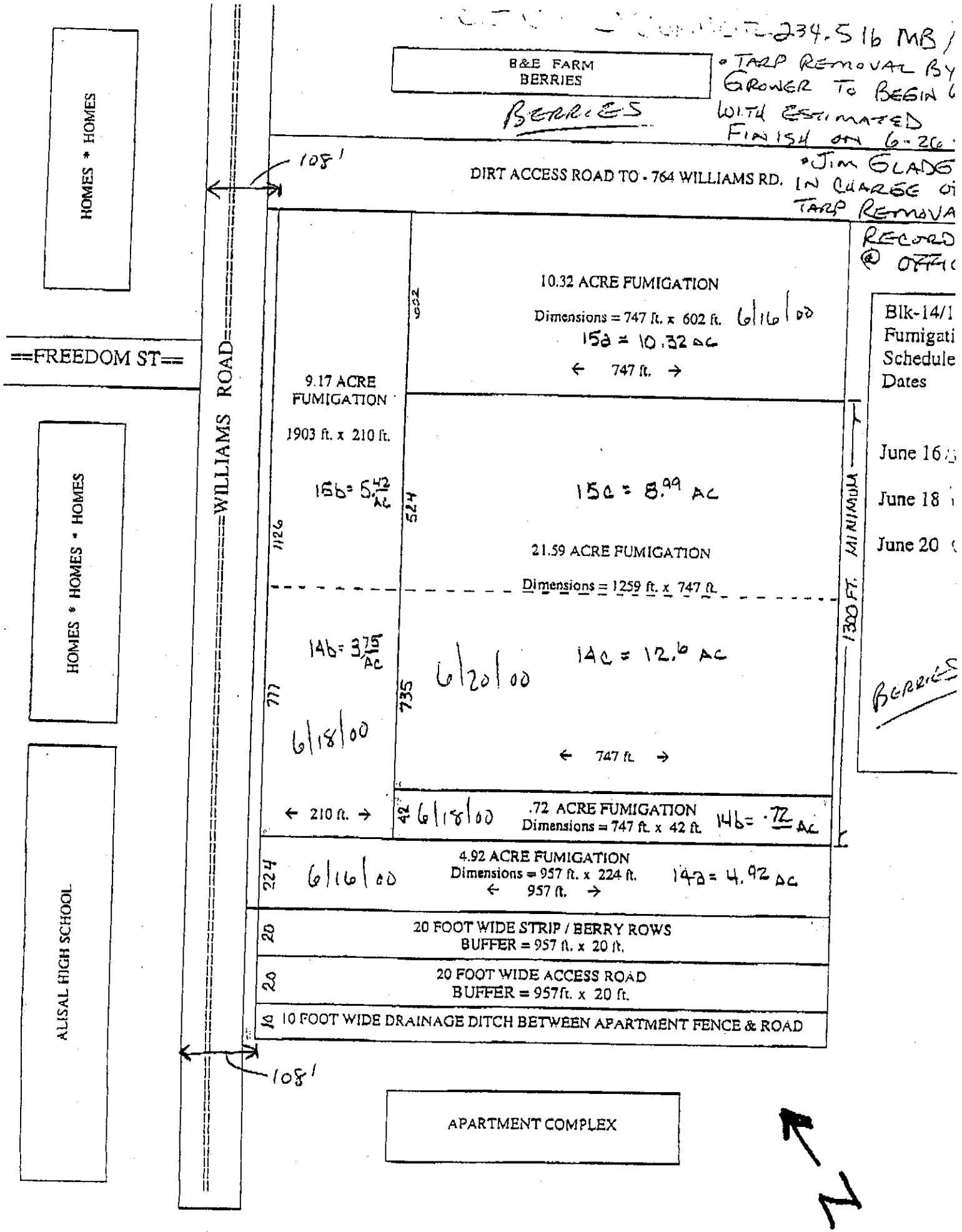
OFFICE COPY -)

RESTRICTIONS					WORKER RE-ENTRY HOURS	DAYS TO HARVEST	EARLY ENTRY PPE REQ	
PLANT BACK	FEED CROP WASTE	POST	PASTURE	BEES				
YES	NO	YES	NO	YES	1.50	000	YES	YES

APPLICATOR: (SIGN HERE) / / DATE

/ /

Sep 26 2000 14:57 P.02
MO CO AG COMMISSIONER Fax:831-758-1290



-234.516 MB /
* TARP REMOVAL BY GROWER TO BEGIN 6
WITH ESTIMATED FINISH ON 6-26
* JIM GLADS IN CHARGE OF TARP REMOVA
RECORD @ OFFI

Methyl Bromide Field Fumigation - Worksite Plan Scenario

Property Operator: **V & L Farms**
Address:
Phone:
Permit Number:
Contact Person
Fumigation Site Location
Pest Control Business: **Western Farm Service**
Address
Phone
Contact Person

Buffer Zone

Methyl Bromide Product: **Methyl Bromide 67/33**
Application Rate: **350 lbs/ac**
Number of Acres: **46.7 acres**
Application Method: **6450.3(a)(3)(B)(1); tarp/shallow/broadcast**
Type of Tarpaulin: **Armin HBA**
Earliest Date of Fumigation: **6/15/00**
Latest Date of Fumigation: **6/25/00**
Description of Activities Within Buffer Zones: **Handling activities, berry picking**
Map showing field location, field dimensions, housing, sensitive sites: **See attached**

Notification to Nearby Properties

Method of Notification: **Flyer**
Copy of Notification: **See attached**
Date(s) of Notification: **6/05/00**
Map showing properties notified: **See attached**

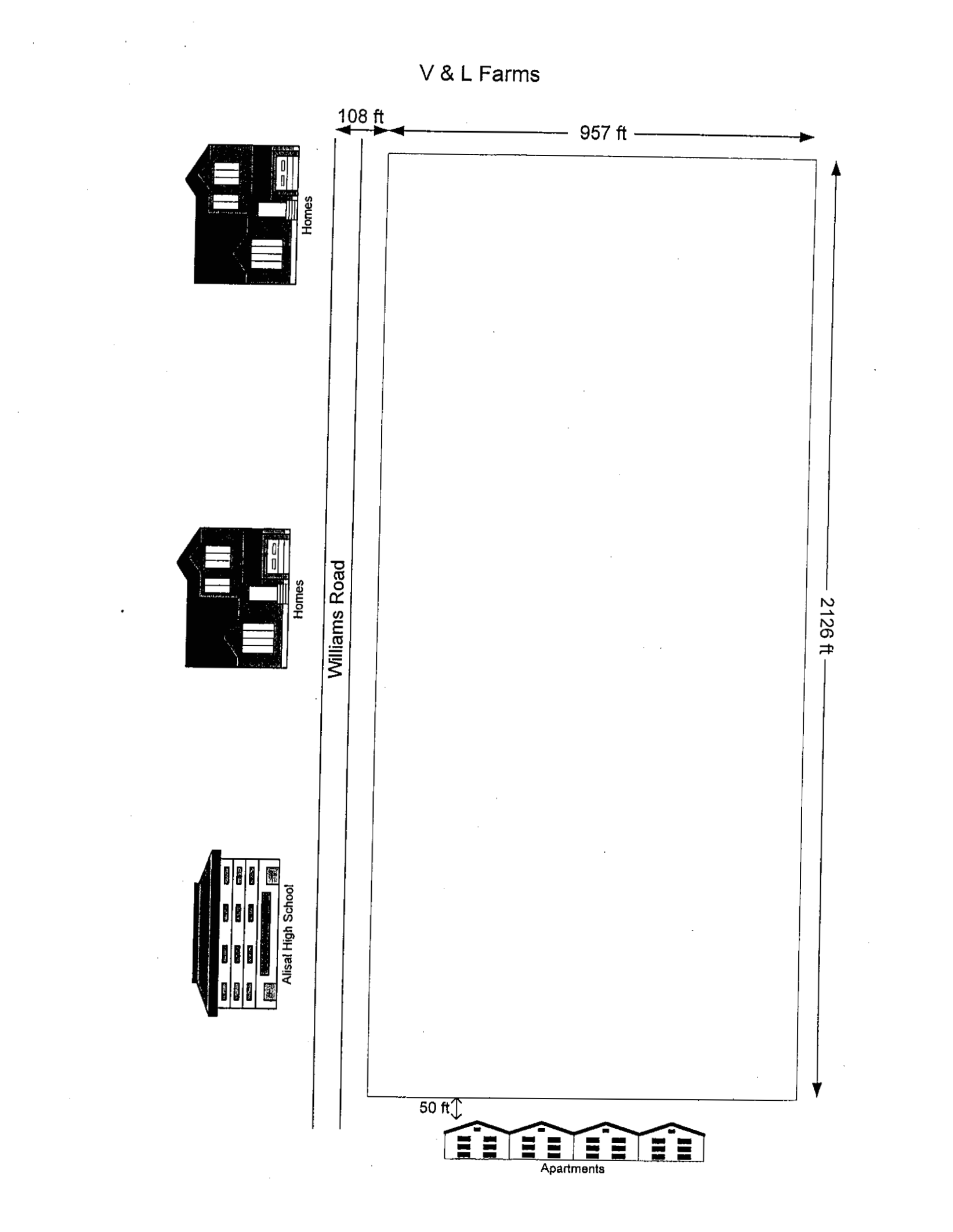
Tarpaulin Repair Plan

Person Responsible: **Bill Lyons, V & L Farms**
Certification: **private applicator, #0001**
Schedule for Checking Tarpaulins: **8:00 AM, 5:00 PM**
Minimum Distance(s) From Sensitive Sites That Tarpaulins Will Be Repaired: **300 ft**
Minimum Time Following Injection That Tarpaulin Will Be Repaired: **4 days**
Minimum Size of Damage That Will Be Repaired: **6 inches**
Other Factors Used to Decide If Tarpaulins Repaired
Type of Testing Device Used To Measure Air Concentrations: **Drager**
Type of Respiratory Protection: **MSA SCBA**

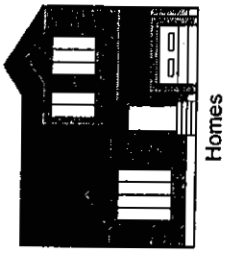
Tarpaulin Removal Plan

Person Responsible: **Bill Lyons, V & L Farms**
Equipment Used to Cut Tarpaulins: **ATV**
Schedule for Tarpaulin Cutting: **5 days after fumigation**
Schedule for Tarpaulin Removal: **6 days after fumigation**

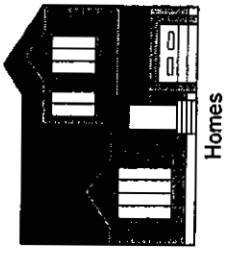
V & L Farms


108 ft
957 ft
2126 ft
Homes
Homes
Williams Road
Alisal High School
50 ft
Apartments

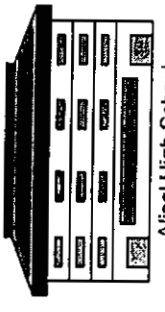
V & L Farms - New Buffer Zone Calculation



Homes



Homes



Alisal High School

108 ft

957 ft

Williams Road

Saturday
Block 2 - Day 2
10 ac
455 X 957 ft

Block 3 - Day 3
10 ac
455 X 957 ft

Saturday
Block 4 - Day 8
10 ac
466 X 933 ft

Block 5 - Day 5
10.5 ac
490 X 933 ft

Saturday
Block 1 - Day 1
6 ac
273 X 957 ft
plus 10 ft unplanted

2126 ft

50 ft

Apartments

V & L Farms New Buffer Zone Calculation

Methyl Bromide Product: **Methyl Bromide 67/33**
Application Rate: **350 lbs/ac**
Number of Acres: **46.7 acres; 957 ft X 2126 ft**
Application Method: **6450.3(a)(3)(B)(1); tarp/shallow/broadcast**

Isolated/Non-Isolated Block = **Isolated**
Application Rate = 350 lbs/ac X 0.67 percent = **234.5 lbs/ac**
Emission Rate = 350 lbs/ac X 0.67 percent X 0.25 emission ratio = **58.6 lbs/ac-day**
Acreage = **46.7 ac**

Block 1 - Day 1 - ALISAL SCHOOL IS WITHIN 300 FT OF OUTER BUFFER ZONE OF BLOCK 1. BLOCK 1 MUST BE COMPLETED 36 HRS PRIOR TO START OF SCHOOL. APARTMENTS ARE ADJACENT TO FIELD. LEAVE UNFUMIGATED AREA NEAR APARTMENTS.

Leave 10 ft unfumigated
Available Outer Buffer Zone = **60 ft**
Max Acreage = Table 3, 60 ft = **6 ac**
6 ac Block = **273 ft by 957 ft**
Inner Buffer Zone = Table 4, 60 lbs/ac-day, 6 ac = **50 ft**
Buffer Duration = Table 5C, 250 lbs/ac, 6 ac = **36 hrs**

Block 2 - Day 1 - CALCULATE LARGEST BLOCK THAT CAN BE FUMIGATED AND MAINTAIN 1300 FT SEPARATION FOR ISOLATED BLOCK

Available Outer Buffer Zone = **108 ft**
Max Width = 2126 - 1300 - 273 - 10 = **543 ft**
Max Acreage = 543 X 957/43560 = **12 ac**
Outer Buffer Zone = Table 3, 10 ac = **100 ft**
Inner Buffer Zone = Table 4, 60 lbs/ac-day, 10 ac = **50 ft**
Buffer Duration = Table 5C, 250 lbs/ac, 10 ac = **36 hrs**
Fumigated Block = **10 ac, 455 ft by 957 ft**
Total Fumigated = 6 + 10 = 16 ac

Block 3 - Day 3

Available Outer Buffer Zone = **108 ft**
Max Acreage = Table 3, 100 ft = **10 ac**
10 ac Block = **455 ft X 957 ft**
Inner Buffer Zone = Table 4, 60 lbs/ac-day, 10 ac = **50 ft**
Buffer Duration = Table 5C, 250 lbs/ac, 10 ac = **36 hrs**
Total Fumigated = 6 + 10 + 10 = 26 ac

Block 4 - Day 8 - ALISAL SCHOOL IS WITHIN 300 FT OF OUTER BUFFER ZONE OF BLOCK 4. BLOCK 4MUST BE COMPLETED 36 HRS PRIOR TO START OF SCHOOL.

Available Outer Buffer Zone = **108 ft**
Max Acreage = Table 3, 100 ft = **10 ac**
10 ac Block Length = 2126 - 273 - 455 - 455 - 10 = **933 ft**
10 ac Block Width = 10 X 43560/933 = **466 ft**
Inner Buffer Zone = Table 4, 60 lbs/ac-day, 10 ac = **50 ft**
Buffer Duration = Table 5C, 250 lbs/ac, 10 ac = **36 hrs**
Total Fumigated = 6 + 10 + 10 + 10 = **36 ac**

Block 5 - Day 5 - CALCULATE LARGEST BLOCK THAT MAINTAINS AVAILABLE BUFFER PLUS 300 FT FROM SCHOOL.

Available Outer Buffer Zone = 108 + 466 - 300 = **274 ft**
Max Acreage = Table 2, 60 lbs/ac-day, 270 ft = **12 ac**
Remaining Acreage = 46.5 - 6- 10 - 10 - 10 = **10.5 ac**
10.5 ac Block Length = 2126 - 273 - 455 - 455 - 10 = **933 ft**
10.5 ac Width = 10.5 X 43560/933 = **490 ft**
Inner Buffer Zone = Table 4, 60 lbs/ac-day, 11 ac = **50 ft**
Buffer Duration = Table 5C, 250 lbs/ac, 11 ac = **36 hrs**

Methyl Bromide Field Fumigation

Bear Creek Scenario

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION

NURSERY

NOTICE OF INTENT TO APPLY RESTRICTED MATERIALS

1007752

COUNTY NO.	SECTION	TOWNSHIP	RANGE	BASE & MERIDIAN	APP. METHOD	PERMITTEE/PROPERTY OPERATOR	APPLICATOR NAME AND ADDRESS
15	30	27	25	M	AIR / GROUND / OTHER	Jackson & Perkins	Tri-Cal Inc, P.O. Box 1327, Hollister, Ca

OPERATOR ID/PERMIT NUMBER: 15-00-1500051

SITE IDENTIFICATION NUMBER: 206 N

TOTAL PLANTED ACRES/UNITS: 27.43

LOCATION: Field 206N Kimberlina 1 1/4 mi E of Hwy 43

BLOCK ID (IF APPLICABLE):

DATE/TIME APPLIED PROPOSED	ACTUAL	TOTAL ACRES/UNITS TREATED PROPOSED	ACTUAL	COMMODITY/SITE TREATED
7-3	[redacted]	27.43	[redacted]	Rose Hrcy

MFG NO.	NAME (IN FULL) OF PRODUCT APPLIED	EPA/CALIF. REGISTRATION NUMBER FROM LABEL		RATE	DILUTION	TARGET PEST
50	BHC MB44.5	8536-72-11220	[redacted]	350	None	Nematodes

DAYS REENTRY: 6 Days

DAYS PREHARVEST: N/A

APPLICATION SUPERVISED BY: Clark Elgin

ENVIRONMENTAL CHANGES/COMMENTS: Method 4 No Houses involved 660 ft Buffer required

SUBMITTED BY: Clark Elgin

DATE: 6-26

TIME: 12:05 PM

RCA NAME: Jess Bueditm

RECEIVED BY: [illegible]

DATE: 6/26/2000

☐ APPROVED
☐ DENIED

TREATMENT AREA

ADJACENT CROPS, SCHOOLS, DWELLINGS, ETC.

(1) CAC

Submit to AGRICULTURAL COMMISSIONER within 7 days of application.

PR-ENF-125X (REV. 2/00)

CROP MAP - 2000

Grower Name: Bear Creek Production Co. Permit No.: 15-00-1500051
Address: P. O. Box 280, Wasco, CA 93280 Phone: (661) 758-5186
Location: Sec 30 Twn 27S Rng 25E Crops: Corn,Roses, Cotton, Nsy Stk W
Map Number: 5 Field Nos.: See Below Sudan grass
Acres: 380.01

N
W + E
S

1/4 (cotton) 1/2 (Roses) 1/4 Fumigated 1-3-00

Kimberlina Rd.

Almonds	|-| Processing sheds |-| GH/Shade house |-| 5 acres F |R| 209 CRN A |A| corn 12 acre L | | 209CRN L |L| Corn O |R| 8 acres W |O| |A|	Packaging Shed 208CRN Corn 36 acres	Fumig 6-28-00 207 Roses 67.5 acres	206 Roses 27.43 acre 206 Roses 37 acres	R O A D 1 ac /-\ HOUSE	205FLW Fallow 15 acres
Fallow	|D| |-| |T| |R| |A| |C| |K| |S| |-| |-|	204 Roses 12 acres 204CRN 26 acres	203CTN Cotton 50.9 acres	202CTN Cotton 49.68 acres	201R 1.5 Roses 201Nsy Stk 10 acres 201CRN Corn 37 acres	

1/4 1/2 1/4

Dresser Ave. GRAPES

Comments:

FILENAME: MAPS-97.xls 23-Jun-00

From : Robert Wegis
Date: 5/12/00
Subject: Methyl Bromide Buffer Zones

The following alternative buffer zones were approved by the Department of Pesticide Regulations on 7/6/95 and have been approved to continue through 12/31/99. These buffer zones assume that method 4 (tarp/shallow/broadcast with a Nobel plow) is used and the application rate is no more than 350 lb./acre.

acres	Resident Buffer (feet)	Worker Buffer (feet)	Res Buffer Duration (days)	Worker Buff Duration (days)	Time Separation (days)	Distance Separations (miles)
80 or less	1300	270	3	2	2	0.5
120 or less	2000	500	5	3	4	1
160 or less	2600	750	6	4	6	2

Watch the separation requirements carefully. With a number of fields being treated in a short time in the same area, some aggregating may be necessary if each field does not have the appropriate time or distance separations.

issued 6-23-00
g. Bressler

Methyl Bromide Field Fumigation - Worksite Plan Scenario

Property Operator: **Bear Creek Production**
Address:
Phone:
Permit Number:
Contact Person
Fumigation Site Location: **206N, 207**
Pest Control Business: **Trical**
Address
Phone
Contact Person

Buffer Zone

Methyl Bromide Product: **GLC MB 99.5**
Application Rate: **350 lbs/ac**
Number of Acres: **67.5 + 27.43 acres**
Application Method: **6450.3(a)(3)(B)(1); tarp/shallow/broadcast**
Type of Tarpaulin: **EPA**
Earliest Date of Fumigation: **6/15/00**
Latest Date of Fumigation: **7/15/00**
Description of Activities Within Buffer Zones: **Handling activities, forklift driving**
Map showing field location, field dimensions, housing, sensitive sites: **See attached**

Notification to Nearby Properties

Method of Notification: **Flyer**
Copy of Notification: **See attached**
Date(s) of Notification: **6/5/00**
Map showing properties notified: **See attached**

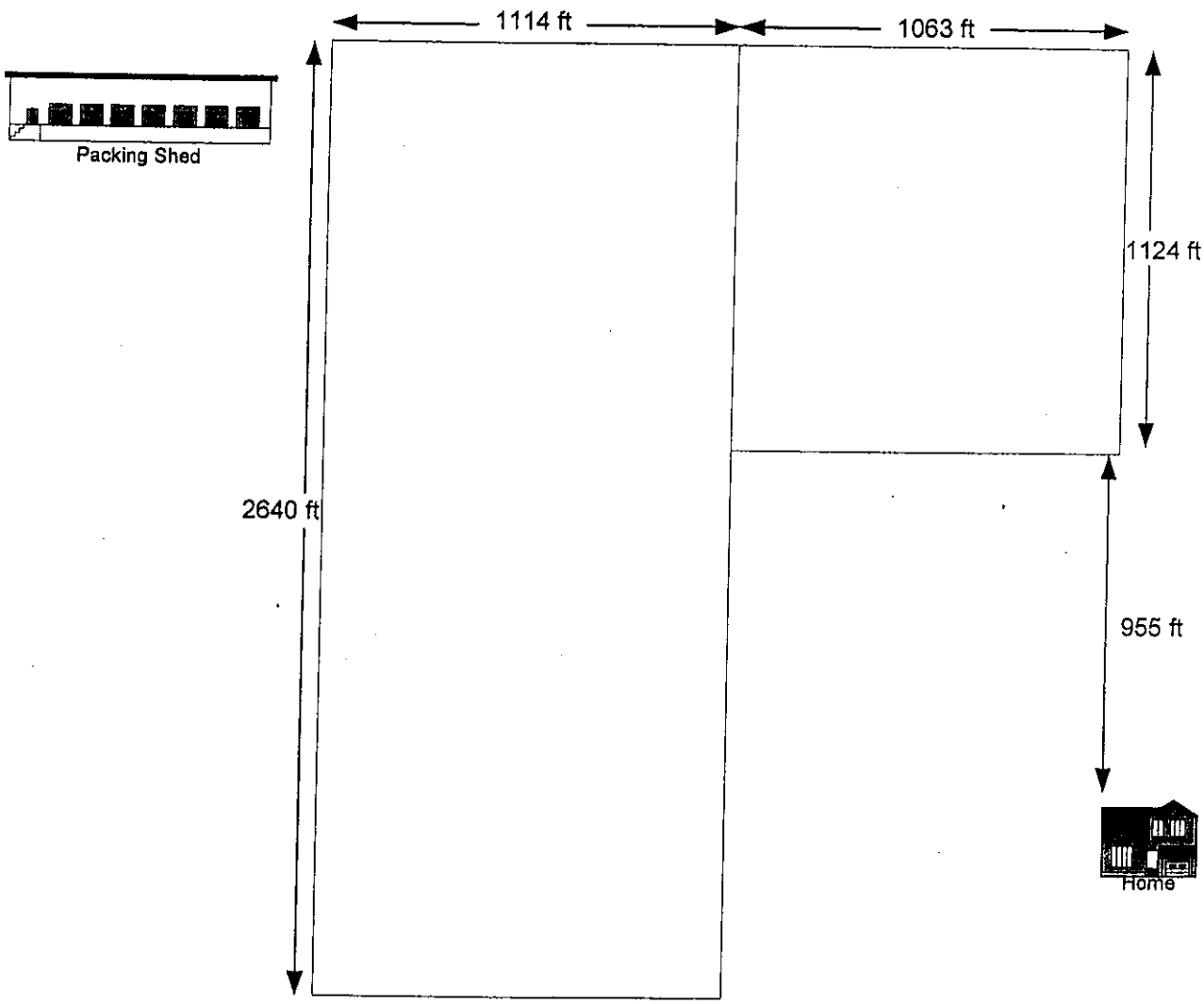
Tarpaulin Repair Plan

Person Responsible: **Winston Hickox, Bear Creek**
Certification: **Private applicator, #0001**
Schedule for Checking Tarpaulins: **8:00 AM, 5:00 PM**
Minimum Distance(s) From Sensitive Sites That Tarpaulins Will Be Repaired: **100 ft**
Minimum Time Following Injection That Tarpaulin Will Be Repaired: **4 days**
Minimum Size of Damage That Will Be Repaired: **6 inches**
Other Factors Used to Decide If Tarpaulins Repaired
Type of Testing Device Used To Measure Air Concentrations: **Drager**
Type of Respiratory Protection: **MSA SCBA**

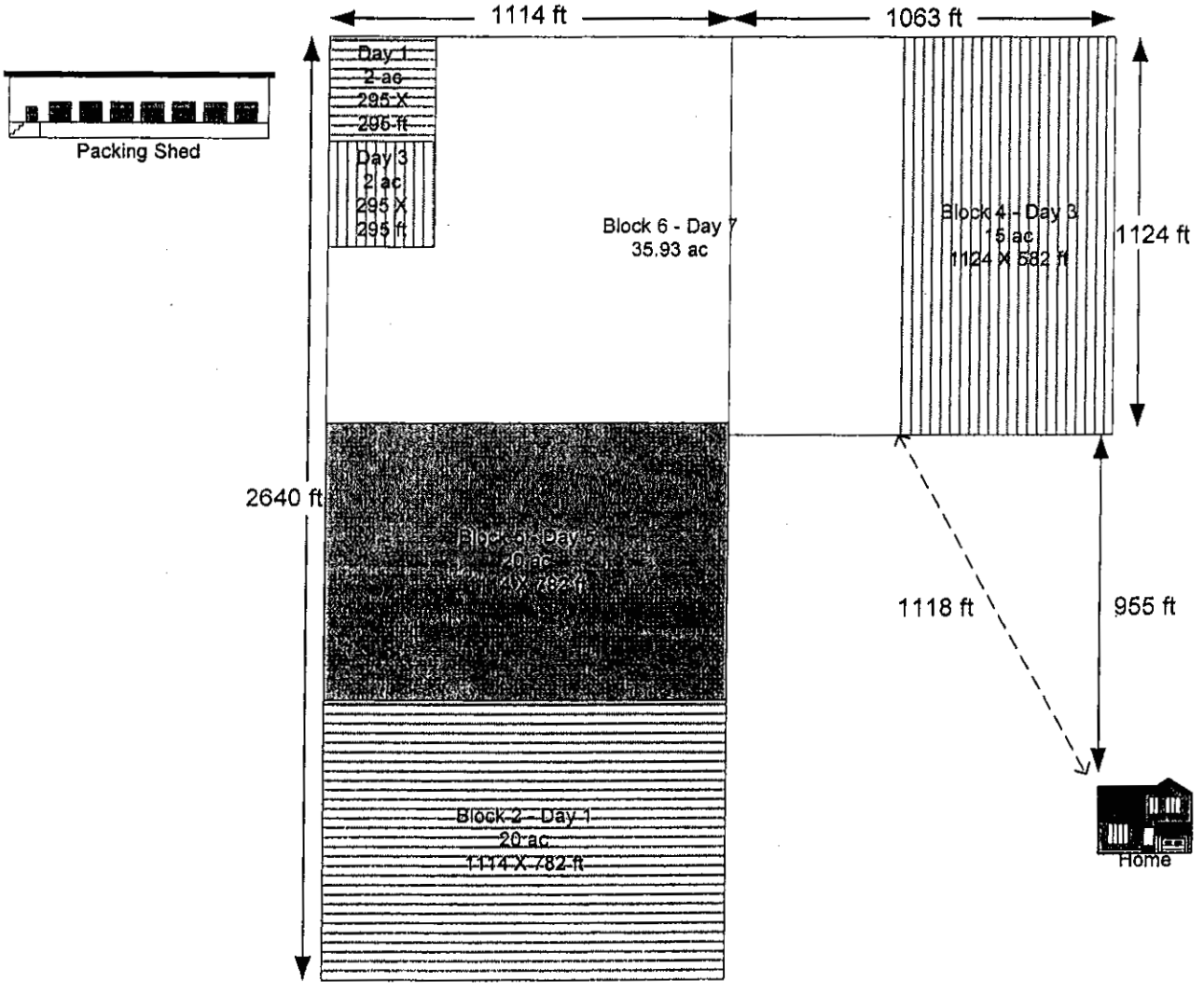
Tarpaulin Removal Plan

Person Responsible: **Winston Hickox, Bear Creek**
Equipment Used to Cut Tarpaulins: **ATV**
Schedule for Tarpaulin Cutting: **6 days after fumigation**
Schedule for Tarpaulin Removal: **7 days after fumigation**

Bear Creek



Bear Creek - New Buffer Zones - 2



Bear Creek Buffer Zone Calculations - 2

Methyl Bromide Product: **GLC MB 99.5**
Application Rate: **350 lbs/ac**
Number of Acres: 67.5 + 27.43 = **94.93 acres**
Application Method: **6450.3(a)(3)(B)(1); tarp/shallow/broadcast**

Application Rate = 350 lbs/ac X 0.995 percent = **348.25 lbs/ac**
Emission Rate = 350 lbs/ac X 0.995 percent X 0.25 emission ratio = **87.1 lbs/ac-day**

Assume 67.5 ac field is 1114 by 2640 ft; 27.43 ac field is 1063 by 1124 ft

Block 1 - Day 1

Available Inner Buffer Zone = **50 ft**
Max Acreage = Table 4, 90 lbs/ac-day, 50 ft = **2 ac**
2 ac Block = square block = **295 ft by 295 ft**
Outer Buffer Zone = Table 2, 90 lbs/ac-day, 2 ac = **190 ft**
Buffer Duration = Table 5C, 350 lbs/ac, 2 ac = **36 hrs**

Block 2 - Day 1 - isolated from Block 1 if separated by 1300 ft

Available Outer Buffer Zone = **1063 ft**
Max Acreage to Meet Buffer = Table 2, 90 lbs/ac-day, 1000 ft = 37 ac
Max Acreage to Maintain 1300 ft Separation
= (2640 - 1300 - 295 ft)(1114 ft)/43560
= **26.7 ac**
Max Acreage to Minimize Buffer Duration = Table 5C, 350 lbs/ac, 36 hrs = **20 ac**
20 ac block = 20 X 43560/1114 = **782 ft by 1114 ft**
Outer Buffer Zone = Table 2, 90 lbs/ac-day, 20 ac = **740 ft**
Inner Buffer Zone = Table 4, 90 lbs/ac-day, 20 ac = **190 ft**

Block 3 - Day 3

Available Inner Buffer Zone = **50 ft**
Max Acreage = Table 4, 90 lbs/ac-day, 50 ft = **2 ac**
2 ac Block = square block = **295 ft by 295 ft**
Outer Buffer Zone = Table 2, 90 lbs/ac-day, 2 ac = **190 ft**
Buffer Duration = Table 5C, 350 lbs/ac, 2 ac = **36 hrs**

Block 4 - Day 3 - isolated from Block 1 if separated by 1300 ft

Available Outer Buffer Zone = **955 ft**
Max Acreage to Meet Buffer = Table 2, 90 lbs/ac-day, 950 ft = 31 ac
Max Acreage to Maintain 1300 ft Separation
= (1114 + 1063 - 1300 - 295 ft)(1124 ft)/43560
= **15.0 ac**
Max Acreage to Minimize Buffer Duration = Table 5C, 350 lbs/ac, 36 hrs = 20 ac
15 ac block = 15 X 43560/1124 = **582 ft by 1124 ft**
Outer Buffer Zone = Table 2, 90 lbs/ac-day, 15 ac = **630 ft**
Inner Buffer Zone = Table 4, 90 lbs/ac-day, 15 ac = **160 ft**

Block 5 - Day 5

Available Outer Buffer Zone = **1063+ ft**
Max Acreage to Meet Buffer = Table 2, 90 lbs/ac-day, 1000 ft = 37 ac
Max Acreage to Minimize Buffer Duration = Table 5C, 350 lbs/ac, 36 hrs = **20 ac**
20 ac block = 20 X 43560/1114 = **782 ft by 1114 ft**
Outer Buffer Zone = Table 2, 90 lbs/ac-day, 20 ac = **740 ft**
Inner Buffer Zone = Table 4, 90 lbs/ac-day, 20 ac = **190 ft**

Block 6 - Day 7

Available Outer Buffer Zone
= $955^2 + 582^2$ = available buffer^2
= **1118 ft**
Max Acreage to Meet Buffer = Table 2, 90 lbs/ac-day, 1100 ft = 40 ac
Acreage Remaining = **35.93 ac**
Outer Buffer Zone = Table 2, 90 lbs/ac-day, 36 ac = **1000 ft**
Inner Buffer Zone = Table 4, 90 lbs/ac-day, 36 ac = **270 ft**
Buffer Duration = Table 5C, 350 lbs/ac, 36 ac = **60 hrs**